

SAFETY DATA SHEET



KALO

SECTION 1: IDENTIFICATION

Company Information	KALO, Inc., 13200 Metcalf Ave., Ste. 250, Overland Park, KS 66213
Phone Numbers	800-255-5196 / 913-491-9146 FAX
Website	www.kalo.com
Product Identity	FRACTION
Reference/Item Number	FRA24
Intended Use	See technical data sheet.
Application Method	See technical data sheet.
24 HOUR EMERGENCY NUMBER/CHEMTREC (USA)	1-800-424-9300
POISON CONTROL CENTER (USA)	1-800-222-1212

SECTION 2: HAZARDS IDENTIFICATION

HAZARD COMMUNICATION STANDARD (HCS) PICTOGRAM(S) AND SIGNAL WORD(S)



WARNING

Eye Irritant 2A:	H319: Causes serious eye irritation.
Skin Irritant 3:	H316: Causes mild skin irritation.
Acute Tox (oral) 4:	H303: May be harmful if swallowed.
Acute Tox (dermal) 5:	H313: May be harmful in contact with skin.
Prevention:	P280: Wear protective gloves and eye/face protection. P264: Wash hands, face and other affected areas thoroughly after handling. P270: Do not eat, drink or smoke when using this product.
Response:	P312: Call a poison center or doctor/physician if you feel unwell. P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing. P337+313: If eye irritation persists, get medical advice/attention. P301+312: IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell. P332+313: IF ON SKIN: If skin irritation occurs, get medical advice/attention.
Storage:	No GHS storage statements.
Disposal:	P501: Dispose of contents/bag in accordance with local/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is labeled with the following GHS classifications, as it contains substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations. This product is a proprietary blend and the ingredients and mixture percentages are being withheld as confidential business information.

Ingredient/Chemical Designations:	Ammonium sulfate, 2-hydroxy-1,2,3-propanetricarboxylic acid
CAS No.:	Mixture
Weight %:	98.99%
Ingredient/Chemical Designations:	Constituents ineffective as spray adjuvants
CAS No.:	
Weight %:	1.01%

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SECTION 4: FIRST AID MEASURES

[DESCRIPTIONS]

General:	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes:	Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.
Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion:	If accidentally swallowed, obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

[MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED]

Overview:	No adverse symptoms or effects anticipated under normal handling conditions. See Section 2 for further details.
Eyes:	Causes serious eye irritation.
Skin:	Causes skin irritation. May be harmful in contact with skin.
Ingestion:	May be harmful if swallowed.

SECTION 5: FIREFIGHTING MEASURES

General Hazard:	Toxic fumes may be emitted in a fire situation.
Extinguishing Media:	Foam, dry chemical, carbon dioxide, water spray or fog.
Hazardous Combustion Products:	Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.
Explosion Hazards:	Dust suspended in air may create a potentially explosive environment.
Fire Fighting Procedures:	Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.
Fire Fighting Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent, and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill:	Contain material. Sweep up spilled material which is contaminated and place it and damaged unusable containers in a container appropriate for non-hazardous chemical waste. Check local, state, and federal regulations for proper disposal.
Large Spill:	Contain material. If material is not contaminated with other materials the product may still be viable for use. Sweep up spilled material which is contaminated and place it and damaged unusable containers in a container appropriate for non-hazardous chemical waste. Check local, state, and federal regulations for proper disposal.
Water Spill:	Do not contaminate any body of water.
Land Spill:	Avoid runoff onto any adjacent land.
Special Protective Equipment:	Always wear proper protective equipment when handling this product.

SECTION 7: HANDLING AND STORAGE

Precautions For Safe Handling:	Do not get in eyes, on skin, or on clothing. Do not breathe vapors or mists. Keep bag closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and wash before reuse. Destroy contaminated belts and shoes and other items that cannot be decontaminated. Have eyewash accessible to use in handling area. See Section 2 for further details.
Conditions For Safe Storage:	Store in tightly closed bags in dry, well-ventilated area, away from excessive heat and incompatibles. Do not allow water or other chemicals to be introduced into contents of bag. Do not store near feed or food products. Do not use or store near open flame or incompatible materials. See Section 2 for further details.
Incompatible Materials:	Oxidizing agents, bases, chlorates, nitrates.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Data:	This product contains no ingredients (at greater than 0.1%) with established limits for exposure under OSHA, ACGIH and/or NIOSH.
Carcinogen Data:	This product contains no ingredients (at greater than 0.1%) that are suspected of being or known to be a carcinogen under OSHA, NTP or IARC.
[PERSONAL PROTECTIVE EQUIPMENT]	
Respiratory:	If workers are exposed to concentrations above the exposure limit, they must use the appropriate certified respirators.
Eyes and Face:	Wear safety eyewear (e.g. safety spectacles/goggles/visors) to protect against the splash of liquids.
Skin:	Overalls, which cover the body, arms, and legs, should be worn. Skin should not be exposed. All parts of the body should be washed after contact.
Engineering Controls:	Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates, and any vapor below occupational exposure limits, suitable respiratory protection must be worn.
Other Work Practices:	See technical data sheet.
[COMMENTS]	
TLV (Units):	Nuisance Dust TLV (units): 15mg/m ³

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Free Flowing Light Blue Granule
Odor:	Slight Chemical
Odor Threshold:	Not Measured
pH:	Not Measured
Specific Gravity:	Not Applicable
Flashpoint:	Difficult To Burn
Solubility in Water:	Complete
Viscosity (cSt):	Not Measured
VOC%:	Not Measured
Vapor Pressure (Pa):	Not Measured
Density:	65.5 lbs/ft ³
Melting/Freezing Points:	Not Measured
Initial Boiling Point/Range (°F/°C):	Not Measured
Flammability (Solid,Gas):	Not Applicable
Upper Flammability/Explosive Limits:	Not Measured
Lower Flammability/Explosive Limits:	Not Measured
Decomposition Temperature:	Not Measured
Auto-Ignition Temperature:	Not Measured
Partition Co-Efficient n-octanol/water (Log Kow):	Not Measured
Evaporation Rate (Ether=1):	Not Measured
Other:	No other relevant information.

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SECTION 10: STABILITY AND REACTIVITY

Stable:	Yes
Hazardous Polymerization:	No
Polymerization:	Will not occur.
Conditions To Avoid:	Heat, open flame, sparks and static electricity.
Hazardous Decomposition Products:	Temperatures above 282°C causes a release of ammonia and sulfur trioxide.
Incompatible Materials:	Strong oxidizers, bases, chlorates, and nitrates.

SECTION 11: TOXICOLOGICAL INFORMATION

[ACUTE TOXICITY ESTIMATE]		
Ingredients:	Ammonium sulfate, 2-hydroxy-1,2,3-propanetricarboxylic acid	
Oral LD50mg/kg:	No Data Available	
Skin LD50mg/kg:	No Data Available	
Inhalation Vapor LC50mg/L/4hr:	No Data Available	
Inhalation Dust/Mist LC50mg/L/4hr:	No Data Available	
ITEM	HAZARD	CATEGORY
Acute Toxicity (mouth):	May be harmful if swallowed.	4
Acute Toxicity (skin):	May be harmful in contact with skin.	5
Acute Toxicity (inhalation):	Not Applicable	--
Skin Corrosion/Irritation:	Causes mild skin irritation.	3
Eye Damage/Irritation:	Causes serious eye irritation.	2A
Sensitization (respiratory):	Not Applicable	--
Sensitization (skin):	Not a skin/contact sensitizer.	--
Germ Toxicity:	Not Applicable	--
Carcinogenicity:	Not Applicable	--
Reproductive Toxicity:	Not Applicable	--
Specific Target Organ Systemic Toxicity-Single Exposure:	Not Applicable	--
Specific Target Organ Systemic Toxicity-Repeated Exposure:	Not Applicable	--
Aspiration Hazard:	Not Applicable	--

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	No additional information provided for this product. This product is not for use in aquatic settings.
Persistence and Degradability:	There is no data available on the preparation itself.
Bioaccumulative Potential:	Not measured.
Mobility In Soil:	No data available.
Results of PBT and vPvB Assess:	This product contains no PBT/vPvB chemicals.
Other Adverse Effects:	No data available.

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply. Dispose of contents in accordance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: Not Regulated

DOT Hazard Class: Not Applicable

DOT Packing Group: Not Applicable

DOT Label: None

IMDG Proper Shipping Name: Not Regulated

IMDG Hazard Class: Not Applicable

IMDG Packing Group: Not Applicable

IMDG Marine Pollutant: No

ICAO/IATA: See Bill of Lading

SECTION 15: REGULATORY INFORMATION

Regulatory Overview: The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA): All ingredients of this product are listed on the TSCA inventory, or are not required to be listed on the TSCA inventory.

WHMIS Classification: D2B

U.S. EPA Tier II Hazards: Fire=NO / Sudden Release of Pressure=NO / Reactive=NO / Immediate (acute)=YES / Delayed (chronic)=NO

EPCRA 302–Extremely Hazardous (0.1%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 311/312–Chemicals and RQs (>0.1%): 302-Acrylamide (impurity) <0.1%

EPCRA 313–Toxic Chemicals (>0.1%): 313-sulfuric acid diammonium <100 / 304-acrylamide (impurity) <0.1%

Proposition 65–Carcinogens (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65–Developmental Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65–Female Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65–Male Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

N.J. RTK Substances (>1%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

PENN RTK Substances (>1%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Company accepts no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations and orders.